CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECRET 25X1 East Germany REPORT NO. COUNTRY Production at Siemens Plania, Berlin DATE DISTR. **SUBJECT** 11 August 1953 NO. OF PAGES 25X1 DATE OF INFO. REQUIREMENT NO. REFERENCES PLACE ACQUIRED 25X kohle" (synthetic carbon). This material was used as electrodes for heating elements and/or electrical resistors. They consisted of silicon carbide mixed with coal tar and heated at 2200°C for two weeks, whereupon the tar carbonized and left only a carbon skeleton. The tar, before use, was blown at 240°C. Silicon carbide was brought to the plant from Stickstoffwerk, Piesteritz. In the case of electronic resistors, kaolin was used instead of the tar, and the mixture baked at 1300°C.

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However, the only carbon black available

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These resistance rods had a graphite coating or sheathing, and the conversion of carbon black to graphite met with difficulties. It had been shown by X-ray diagrams that only blacks of a definite particle size gave satisfactory results, and that coke or anthracite gave

suitable carbon blacks.

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to this plant was derived from acetylene, and was not too good for the purpose. In addition, the laboratories had no scientific means available to them to make the necessary measurements.

Also manufactured were carbon-copper contact brushes, contact rods for trolley cars, and "carbons" used in search lights. The heating rods manufactured were usually about two times as heavy at the ends as in the center in order to insure equalization of temperatures, since the centers usually remained cooler than the ends. "Silit" heating rods were produced at the rate of five to six tons per month, highohmage resistors ranging from 30 ohm to 50 kilo-ohm at the rate of 1000 pieces per month, and contact rods at the rate of 60-80 pieces per month. The latter had to be treated at 2000-2500°C for four to five days. These production figures constitute actual deliveries and disregard the pieces which had to be rejected due to imperfections (sometimes up to 200 per cent of actual deliveries). Ninety per cent of the materials were reported to be exported to the USSR, China

Hardening ovens (annealing ovens?) for

tools were sent mainly to China.

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the machines were used beyond capacity, dry-mix rollers were quite worn, and the large ovens were estimated to last at best another one and a half to two years. quotas were set by "scientific" means and were much too high. The generator gas produced at this plant was only 1300 KCal quality instead of 1600.

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